

owners manual

Model No.
45-0214

CAUTION:
Read Rules for
Safe Operation
and Instructions
Carefully



BROADCAST SPREADER 70 (PUSH)

- **Assembly**
- **Operation**
- **Maintenance**
- **Repair Parts**



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PRINTED IN U.S.A.

FORM NO. 44668
(12/90)

RULES FOR SAFE OPERATIONS

The following safety precautions are suggested. This broadcast spreader is designed, engineered and tested to offer reasonably safe and effective service, provided it is operated in strict accordance with these instructions. Failure to do so may result in personal injury. Always observe the rules of safe operation.

1. Do not allow anyone to operate the broadcast spreader without proper instructions.
2. Do not permit children to operate the broadcast spreader.
3. Eye protection should be worn when operating spreader.
4. Keep all nuts, bolts and screws tight to be sure equipment is in safe working condition.
5. Read instructions and caution notes for handling /spreading of materials purchased for spreading.
6. Follow maintenance and lubrication instructions as outlined in this manual.



LOOK FOR THIS SYMBOL TO POINT OUT IMPORTANT SAFETY PRECAUTIONS. IT MEANS -- ATTENTION. BECOME ALERT. YOUR SAFETY IS INVOLVED.

Your broadcast spreader carton contains parts as shown in figure 1. The hardware package contains parts shown in figure 2 on page 3. Identify all parts any layout as shown in figures 1 and 2.

CARTON CONTENTS

LOOSE PARTS IN CARTON

1. Handle Tube (long)
2. Braces
3. Flow Control Mount Bracket
4. Flow Control Gage
5. Flow Control Arm
6. Handle Tube (short)
7. Flow Control Rod
8. Leg Stand Tube
9. Wheels (R.H. and L.H.)
10. Hopper Assembly
11. Hardware Package (not shown)

CARTON CONTENTS

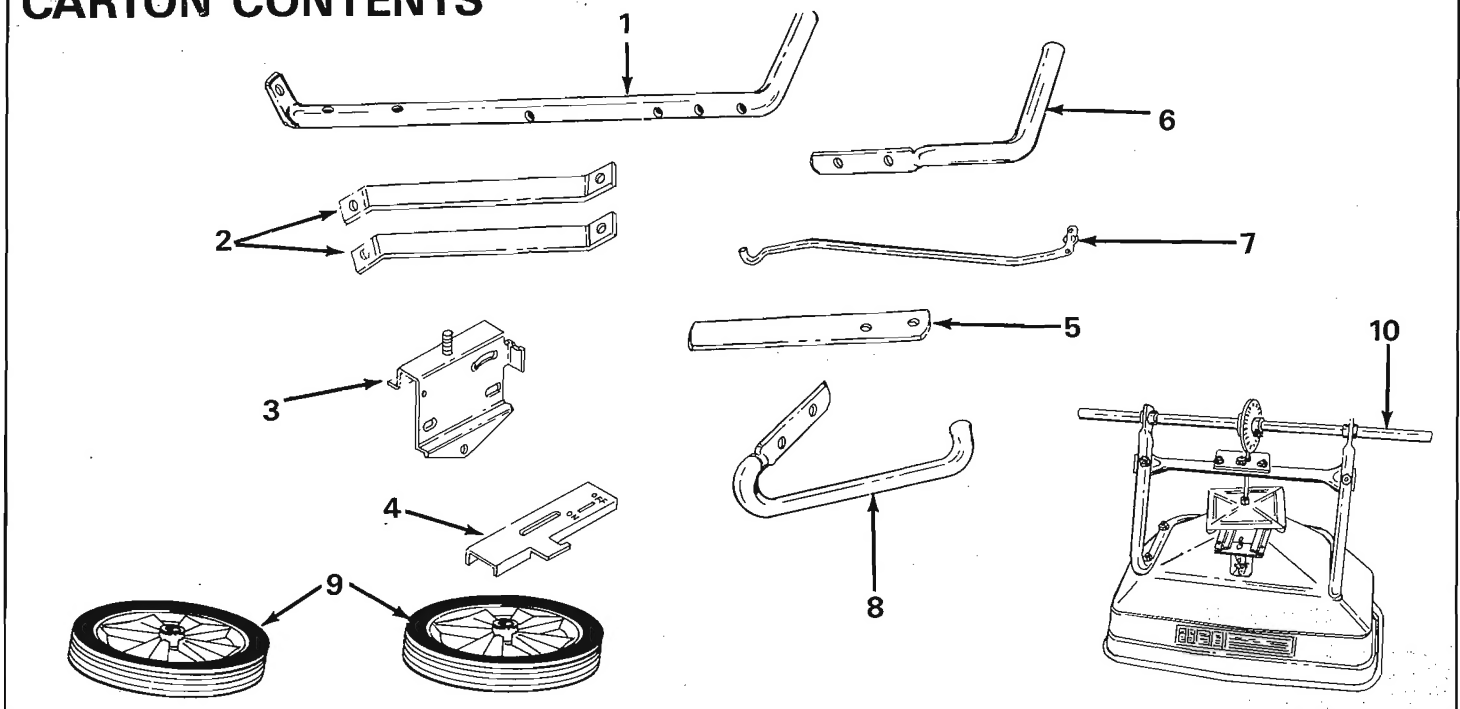


FIGURE 1

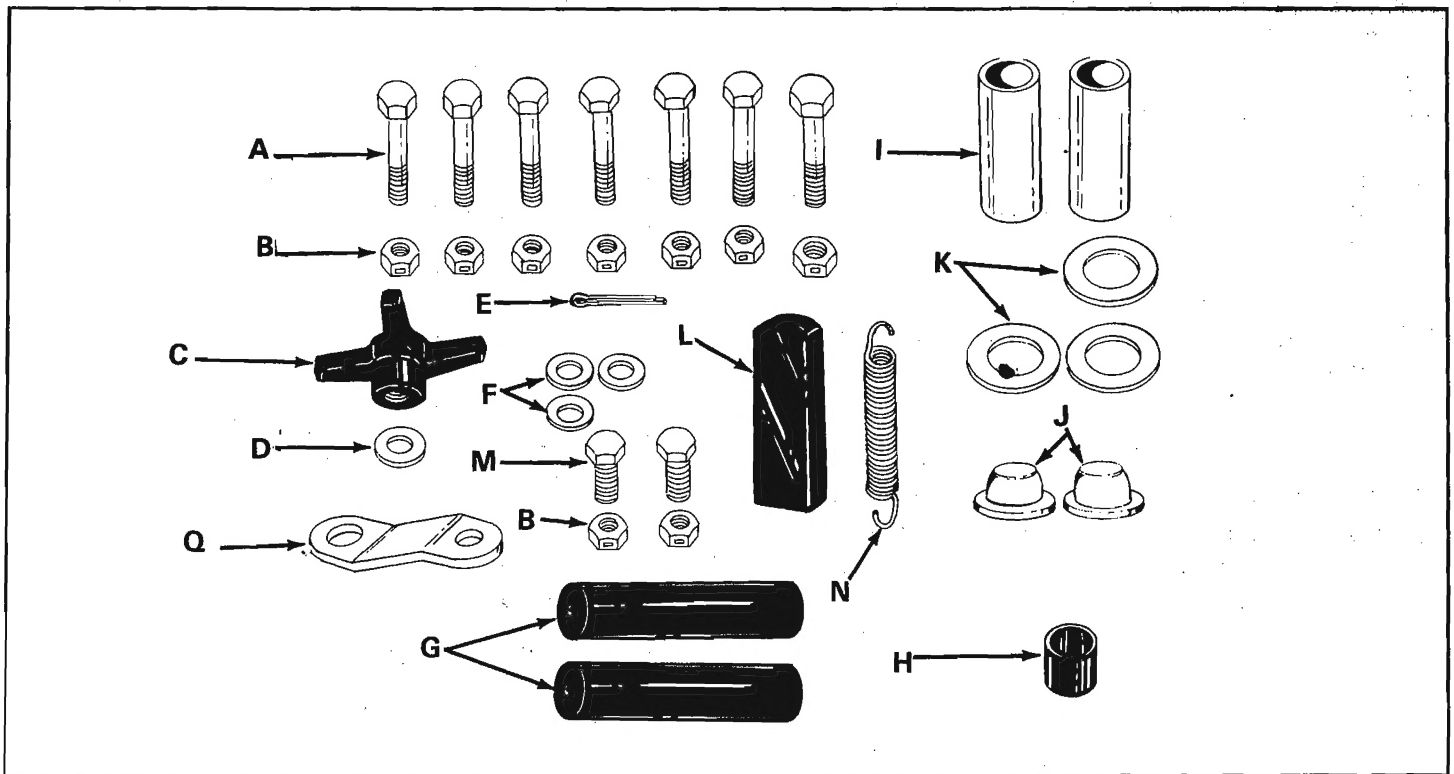
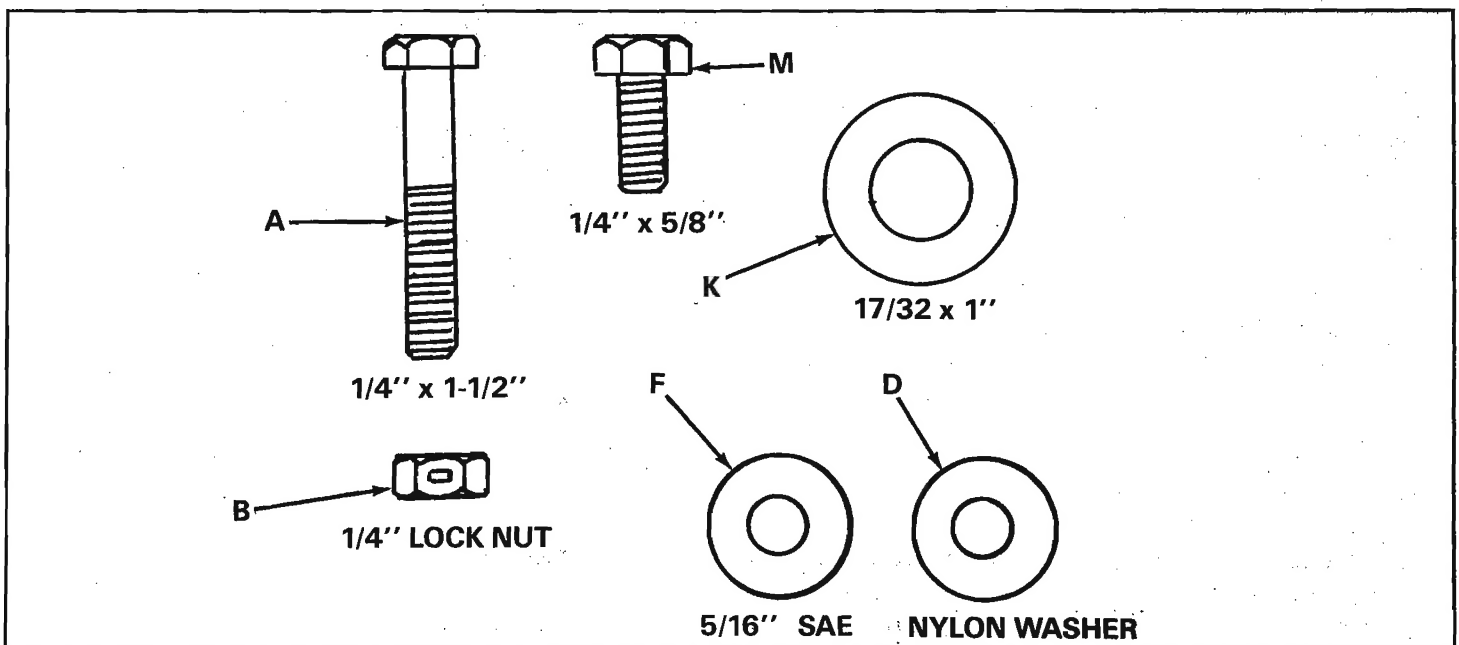


FIGURE 2- HARDWARE PACKAGE

REF. NO.	QTY.	DESCRIPTION	REF. NO.	QTY.	DESCRIPTION
A	7	Hex Bolt 1/4-20 x 1-1/2" Long	H	1	Vinyl Cap
B	9	Hex Lock Nuts 1/4-20 Thread	I	2	Spacer Tube
C	1	Hand Knob	J	2	Push Nut (Hub Cap)
D	1	Nylon Washer	K	3	Flat Washers 1" O.D.
E	1	Cotter Pin 3/32 x 3/4" Long	L	1	Grip
F	3	Flat Washer 5/16" SAE	M	2	Hex Bolt 1/4-20 x 5/8" Long
G	2	Handle Grip	N	1	Extension Spring
			O	1	Flow Control Link



FULL SIZE HARDWARE REFERENCE CHART

ASSEMBLY INSTRUCTIONS

TOOLS REQUIRED FOR ASSEMBLY

- (1) Pliers
- (2) 7/16" Open or Boxed End Wrench
- (1) Small Hammer

1. Remove the spreader, loose parts and hardware package from the carton. See figures 1 and 2.
2. Turn the spreader upside down as shown in figure 3, so that it rests on the hopper.

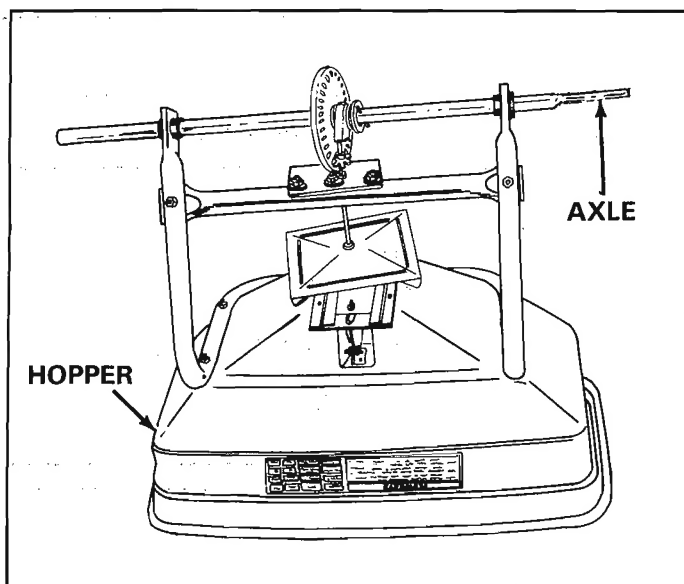


FIGURE 3

3. Assemble one spacer, and one 1" diameter flat washer to each end of axle. See figure 4.
4. Place wheel with round center hole onto round end of axle. The side of the wheel with the shortest hub must be toward outside of axle. See figure 4 and 5.

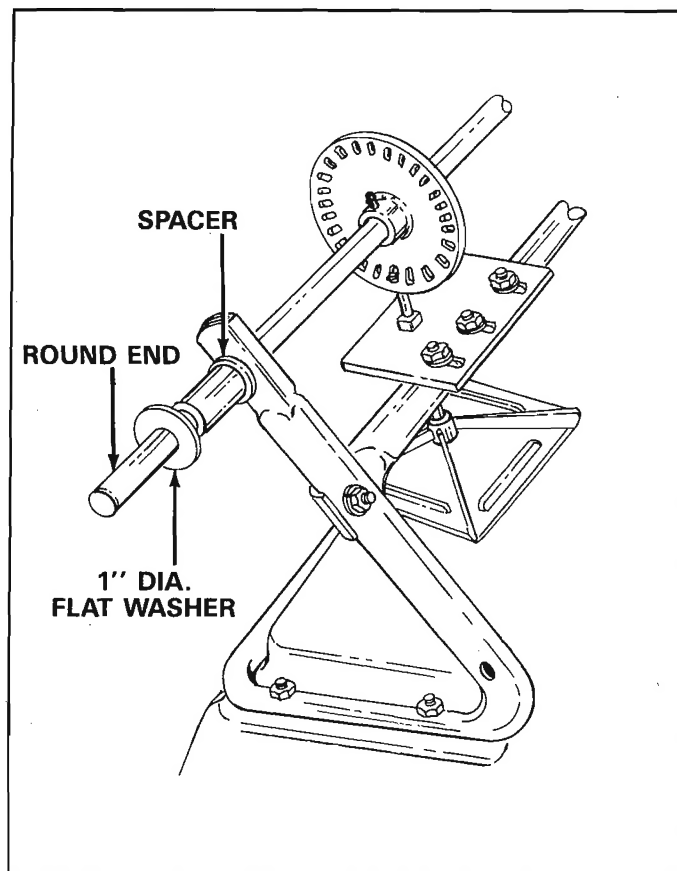


FIGURE 4

5. Place one 1" diameter flat washer and hub cap onto axle outside of wheel. Using small hammer lightly tap hub cap until snug against wheel. See figure 5.

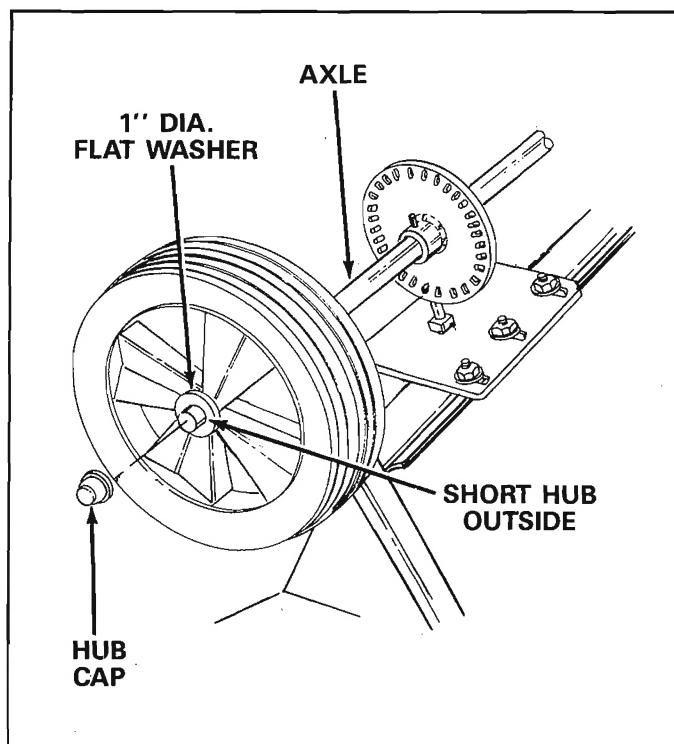


FIGURE 5

6. Place wheel with flat sided center hole onto swaged end of axle. The side of the wheel with the shortest hub must be toward outside of axle. See figure 6.
7. Place hub cap onto axle outside of wheel. Using a small hammer lightly tap hub cap until snug against wheel. See figure 6.

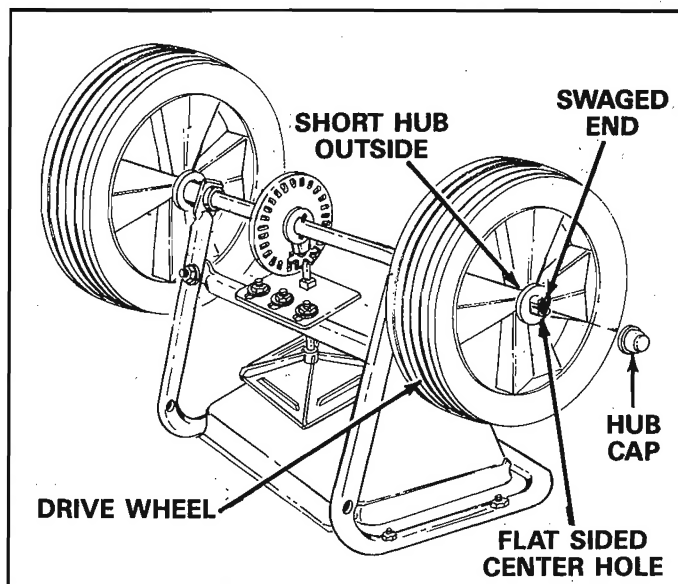


FIGURE 6

8. Lay the broadcast spreader down so it rests on its front. (Flow chart should be up).
9. Remove the 1/4" hex bolt, flat washer and hex lock nut from the center of the crossover tube. See figure 7.

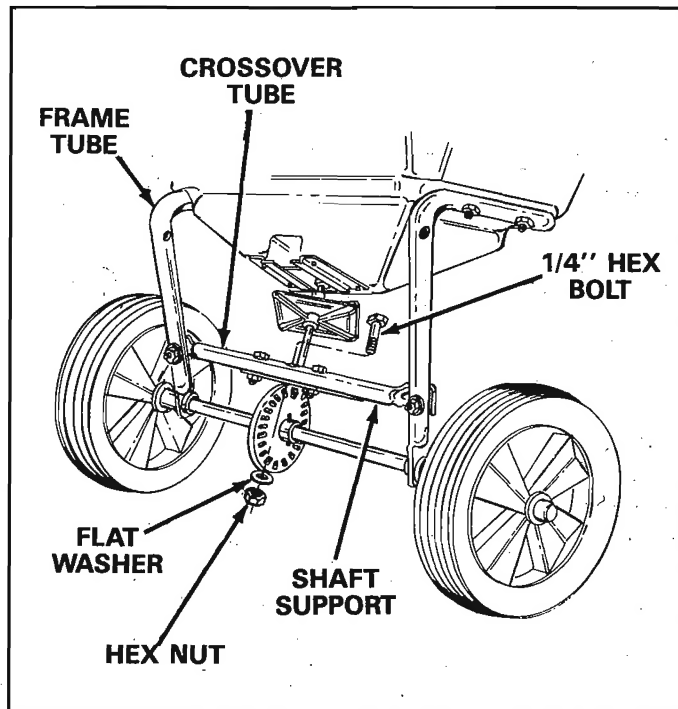


FIGURE 7

10. Place the handle tube (long) on the crossover tube, align the holes in hitch tube, crossover tube and shaft support, assemble with 1/4" hex bolt, flat washer and hex nut, removed in step 8. See figures 7 and 8. **MAKE ONLY FINGER TIGHT AT THIS TIME.**

11. Assemble two hitch braces to the inside of the hopper frame, one each side, using two 1/4" x 1-1/2" and two 1/4" lock nuts. See figure 8. **DO NOT TIGHTEN AT THIS TIME.**

12. Align the holes in the ends of the two hitch braces with the nearest hole in the handle tube assembly, secure with 1/4" x 1-1/2" hex bolt and 1/4" lock nut. See figure 8.

13. Tighten all hex nuts and bolts, following same sequence as assembled in steps 10, 11 and 12. **DO NOT COLLAPSE TUBE WHEN TIGHTENING.**

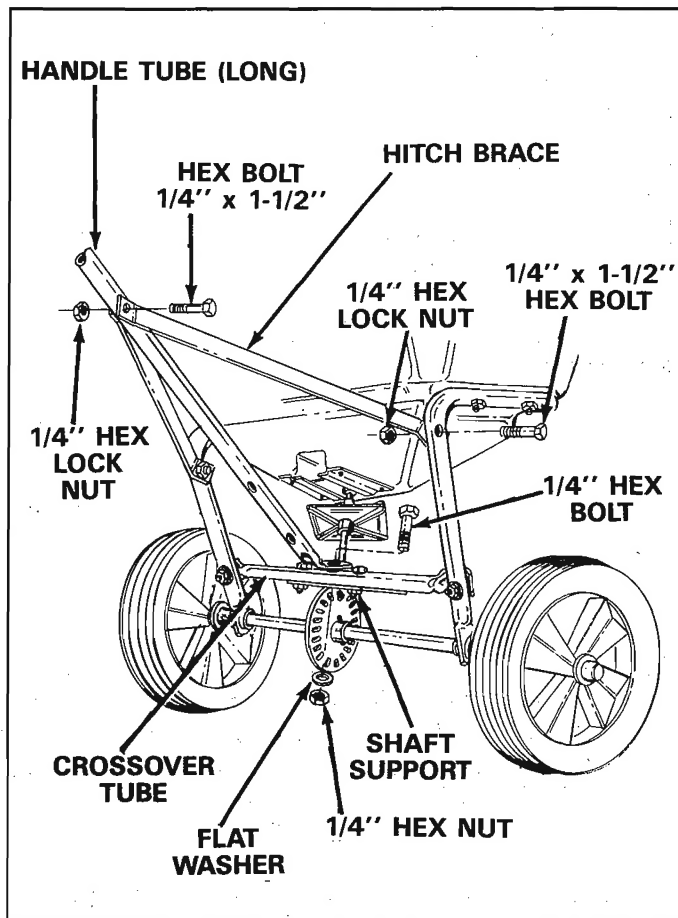


FIGURE 8

14. Assemble the leg stand tube to the handle tube (long) using two (2) 1/4" x 1-1/2" hex bolts. Secure tightly with two (2) 1/4" hex lock nuts. See figure 9.
15. Place vinyl cap on the leg stand tube. See figure 9.

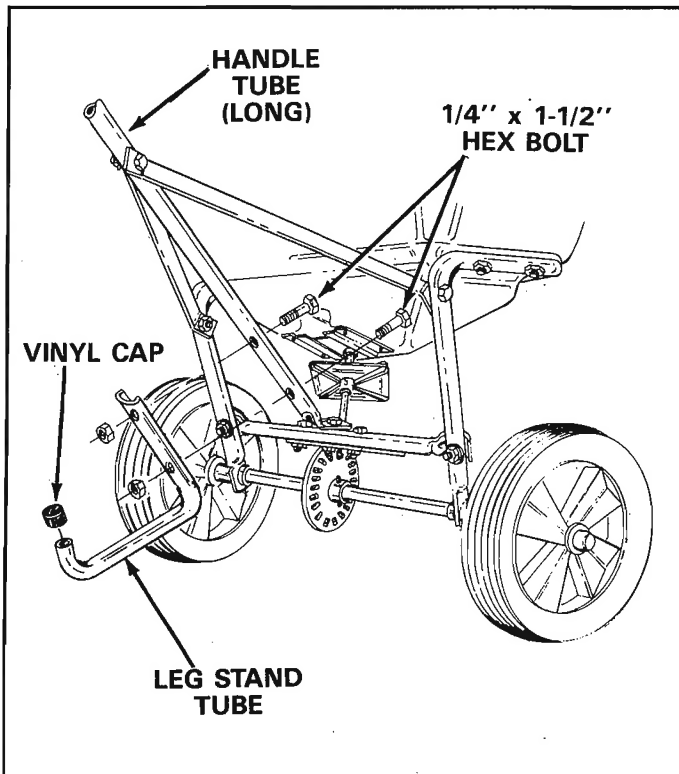


FIGURE 9

16. Assemble the flow control link (the end with smallest hole) to the flow control arm using one 1/4" x 5/8" hex bolt and one 1/4" lock nut. See figure 5. **DO NOT OVER TIGHTEN, FLOW CONTROL LINK MUST PIVOT FREELY.**
17. Place vinyl grip on the flow control arm. See figure 10.

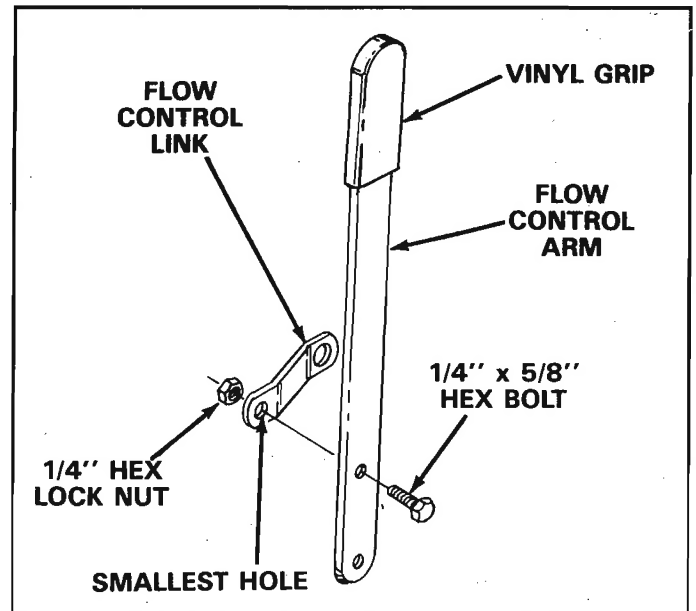


FIGURE 10

18. Assemble the flow control arm to the flow control mounting bracket using one 1/4" x 5/8" hex bolt and one 1/4" lock nut. See figure 11. **DO NOT OVER TIGHTEN, FLOW CONTROL ARM MUST PIVOT FREELY.**
19. Hook one end of extension spring through small hole near bend in flow control rod and the other end through hole in flow control mounting bracket. See figure 11.

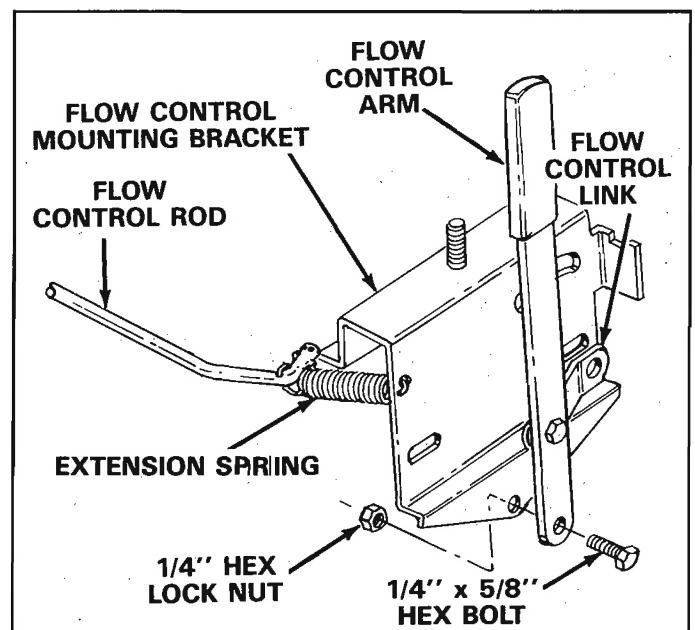


FIGURE 11

20. Place 5/16" SAE washer on end of flow control link, align with slot in flow control mounting bracket and insert end of flow control rod through slot and hole in flow control link. Secure with 3/32" cotter pin. See figure 12.

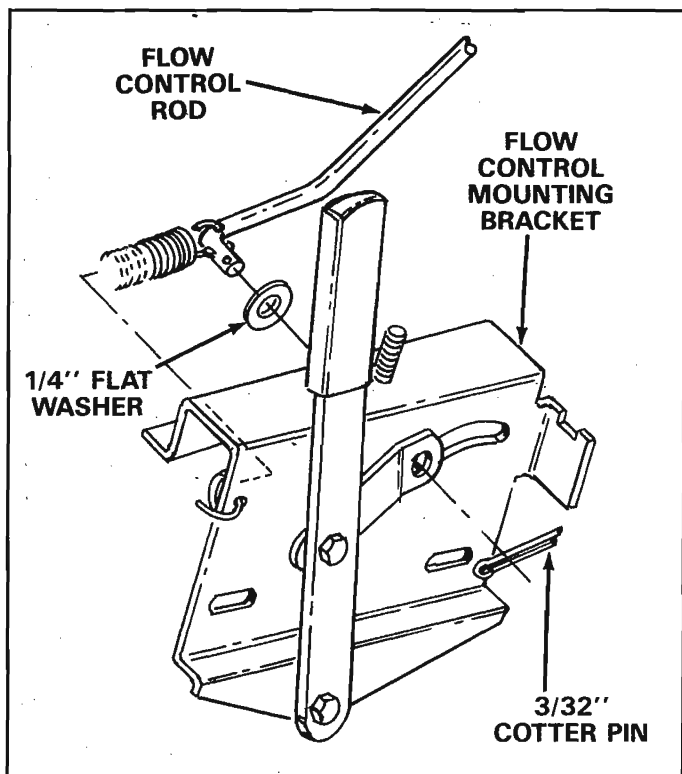


FIGURE 12

21. Hook free end of flow control rod through hole in slide gate bracket located near bottom of hopper. See figure 13.

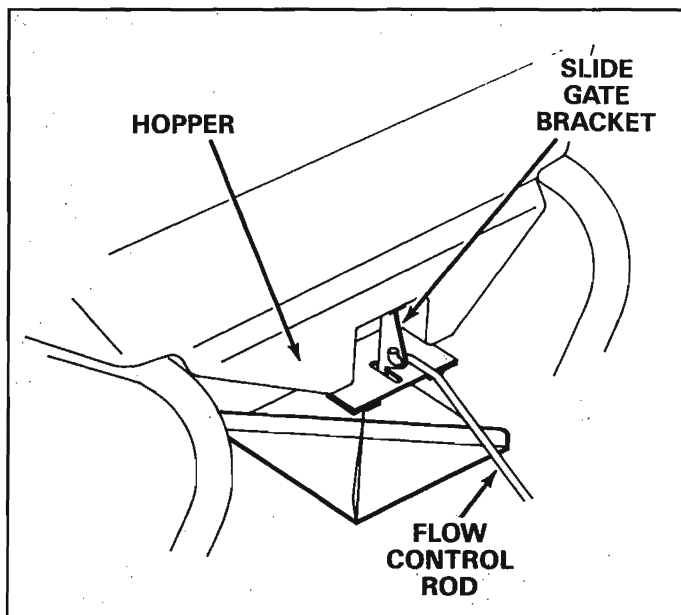


FIGURE 13

22. Assemble flow control mounting bracket and the handle tube (short) to the handle tube (long) using two 1/4" x 1-1/2" hex bolts, two 5/16" SAE washers and two 1/4" hex lock nuts. **DO NOT TIGHTEN AT THIS TIME.**

23. Place handle grip on each handle tube. See figure 14.

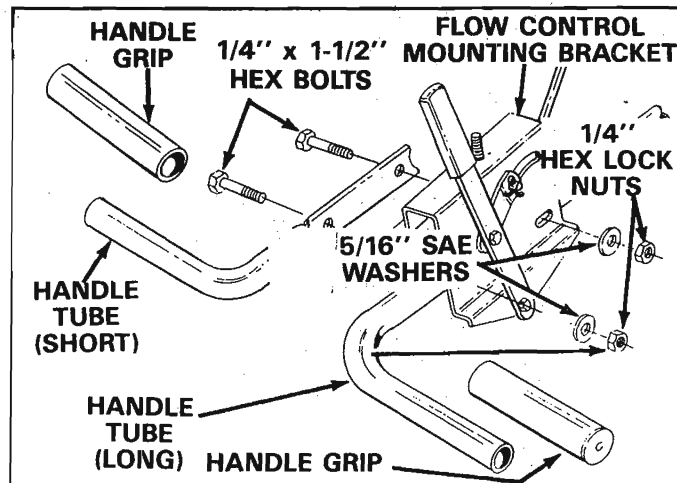


FIGURE 14

24. Assemble the flow control gage onto the flow control mounting bracket as shown in figure 15. Secure with nylon washer and hand knob.

25. Move flow control arm to off position and push flow control mounting bracket toward hopper until closure plate (located in bottom of hopper) is completely closed. Tighten 1/4" hex lock nuts assembled in step 22. See figure 15.

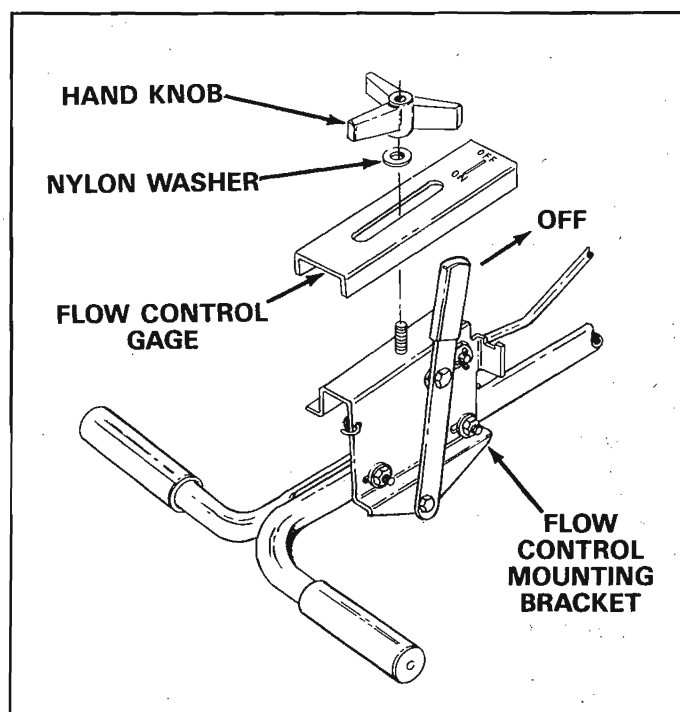


FIGURE 15

26. Pre-lubricate per lubrication section on page 9 before operating spreader.

OPERATION

The application spread pattern should overlap to insure uniform coverage at the edges. The approximate distance between each pass is shown in the application diagram. See figure 16.

APPLICATION DIAGRAM

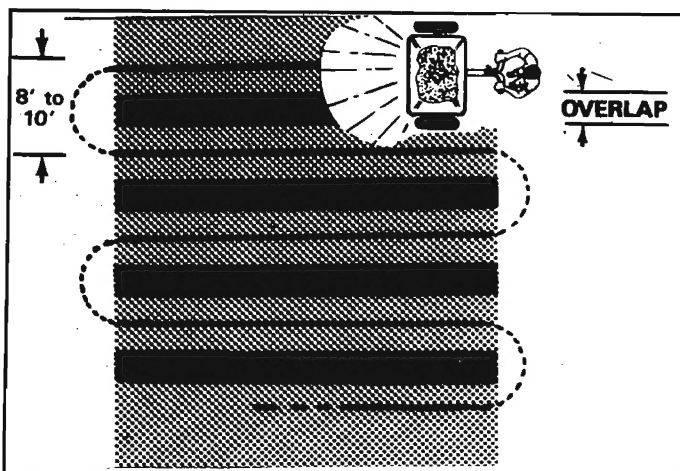


FIGURE 16



3 M.P.H. is equivalent to traveling 100 feet in 23 seconds.

FLOW RATE ADJUSTMENT.

(See figure 17)

1. Push forward on the flow control arm to **off position** and pull back to **on position**. The higher the number on flow rate gage the larger the opening in the bottom of hopper.
2. **REFER TO FLOW RATE CHART AND INSTRUCTIONS ON FERTILIZER BAG TO SELECT PROPER FLOW RATE SETTING.**
3. Loosen the hand knob to set the flow gage to the desired flow setting and tighten the hand knob.
4. Always move flow control arm to **off position** before stopping or turning spreader.
5. The spreader should be moving before you move the flow control arm to the **on position**.

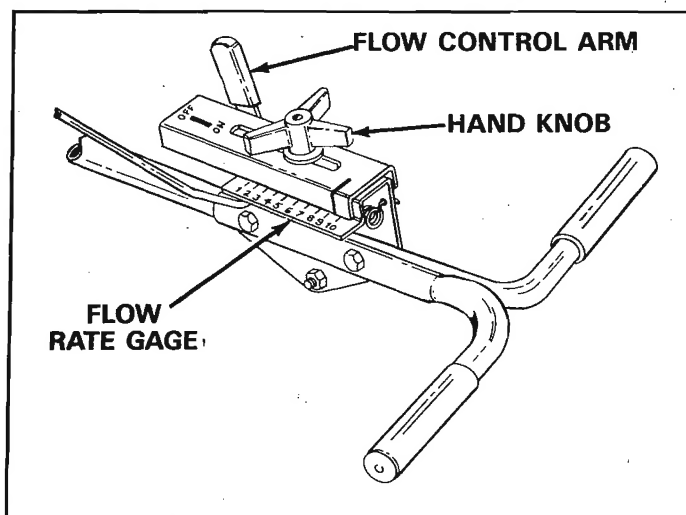


FIGURE 17

FLOW RATE CHART

MATERIAL	TYPE	Flow Rate Setting At 3 M.P.H.	
		Light	Heavy
Fertilizer	Granular ---	3	5
	Pelleted ---	5	7
Grass Seed	Fine-Blue-grass,	2	4
	Coarse-Rye, Fescue,	6	8
Ice Melters	Granular	6	8
	Pelleted		



Do not use powdered lime, only granulated materials are approved for use.

1. Determine approximate square footage of area to be covered and estimate amount of fertilizer or seed required.
2. With flow control arm in **off position**, set flow rate gage at number indicated in flow rate chart—light or heavy application rate. **Also, refer to the bag instructions for manufacturers recommended settings.**
3. Break up lumpy fertilizer as you fill hopper.
4. To broadcast, always have spreader in motion before opening closure plate. **Do not allow spreader to sit stationary with flow control arm in ON position.** If fertilizer is accidentally deposited too heavily in a small area, soak down thoroughly with garden hose or sprinkler to prevent burning of lawn.

IMPORTANT: Application rates (shown on chart) are affected by humidity and moisture content of material (granular and pellet); therefore, minor setting adjustments may be necessary to compensate for this condition. The rate chart is calculated for light and heavy application. The faster you walk, the wider the broadcast width. A variation in speed will determine the flow rates and width of broadcast.



CAUTION

When broadcasting weed control fertilizers make sure broadcast pattern does not hit evergreen trees, flowers or shrubs.

MAINTENANCE

1. Do not store spreader with any material left in hopper.
2. Clean your spreader after use. Flush thoroughly with water.
3. If for any reason the axle, gear and sprocket assembly is disassembled, be sure to mark position of parts as they are removed. Drive wheel and sprocket position determine relation direction of spreader plate. See figure 5. With reassembly of gear and sprocket use shim washers (see page 10 Ref. No. 21) as needed for minimum backlash. Add grease to gear and sprocket.
4. If agitator wire becomes damaged or worn it can be replaced. Loosen 3/8" lock nut on the top of sprocket shaft until agitator wire is free. Remove old agitator wire from hole in agitator sleeve and replace with new agitator wire. Position agitator wire so that sprocket shaft turns freely and tighten 3/8" lock nut on top of sprocket shaft. See figure 18.

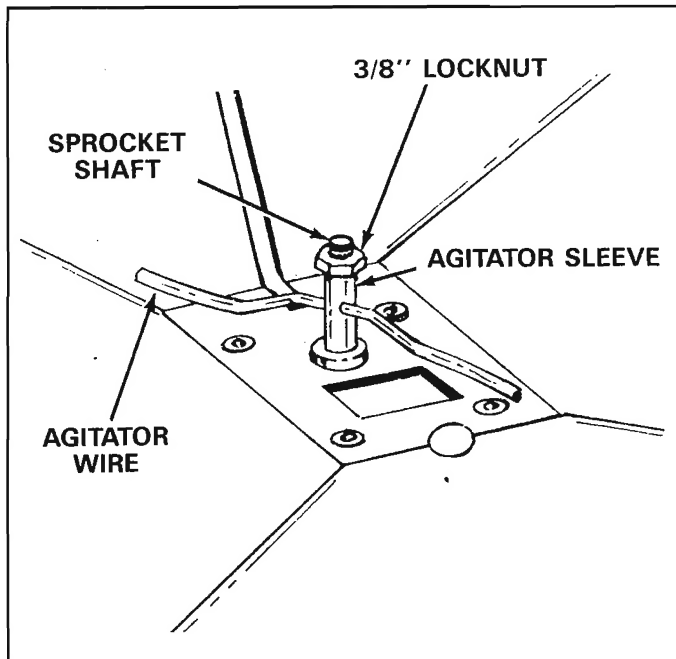


FIGURE 18

5. Heavy moisture conditions may require a cover over the hopper to keep contents dry. The vinyl cover acts as a wind and moisture shield, but should not be used as rain cover. See figure 19.



FIGURE 19

LUBRICATION

(See figure 20)

1. Apply a little automotive grease as needed to the sprocket and gear.
2. Oil nylon bushings on sprocket shaft as shown in figure 20,
3. Oil axle/shaft bushing on axle as shown in figure 20.
4. Oil right hand wheel bearing as needed.

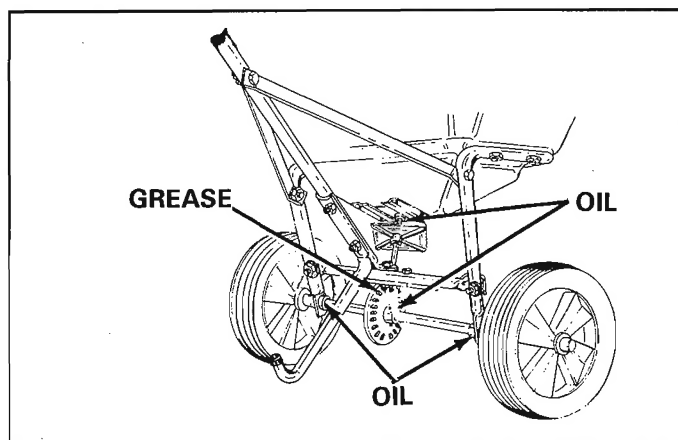
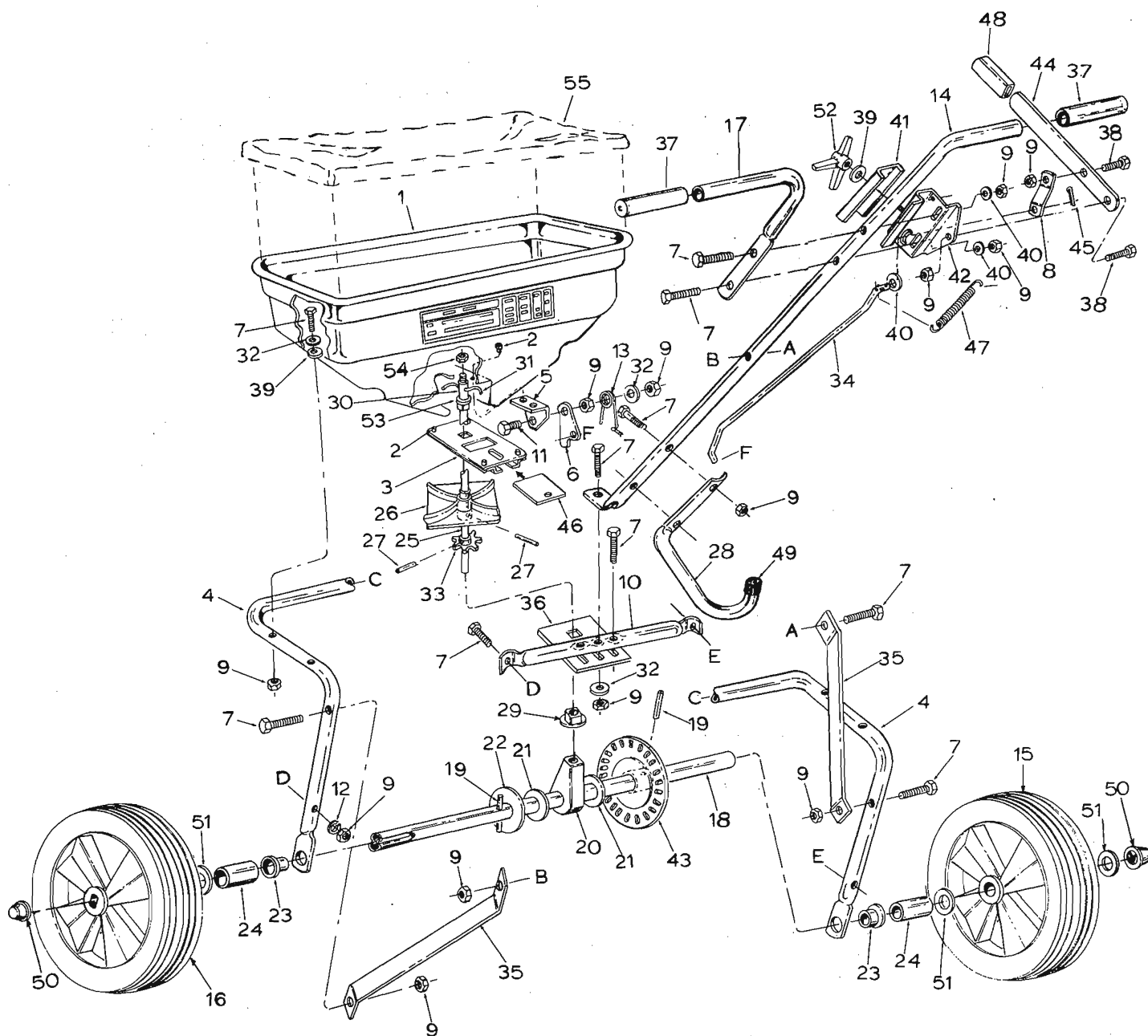


FIGURE 20

REPAIR PARTS FOR BROADCAST SPREADER MODEL 45-0214



REPAIR PARTS LIST FOR BROADCAST SPREADER MODEL 45-0214

REF. NO.	PART NO.	QTY.	DESCRIPTION	REF. NO.	PART NO.	QTY.	DESCRIPTION
1	44624	1	Hopper - Broadcast Spreader	28	44587	1	Tube, Leg Stand
2	43882	6	Rivet - Stainless	29	43852	1	Bushing, Nylon .375 I.D.
3	62482	1	Ass'y. - Guide Closure	30	23766	1	Sleeve, Agitator
4	44588	1	Tube, Frame	31	43878	1	Wire, Agitator
5	23753	1	Slide Gate Angle Bracket	32	43088	10	Washer, Flat 1/4" Std.
6	23758	1	Slide Gate Bracket	33	44468	1	Sprocket - 6T
7	43648	20	Bolt, 1/4-20 1-1/2" Lg.*	34	44514	1	Rod, Flow Control
8	23756	1	Flow Control Link	35	23525	2	Brace, Hitch
9	43013	24	Nut, Hex Lock 1/4-20 Thd.*	36	23780	1	Support, Shaft
10	44591	1	Tube, Crossover	37	44482	2	Grip, Handle
11	43012	1	Bolt, Hex 1/4-20 x 3/4" Lg. Gr. 5	38	43866	2	Bolt, Hex 1/4-20 x 5/8" Lg. Gr. 5
12	43177	2	Lock Washer Spring 1/4" I.D.*	39	1543-069	7	Washer, Nylon
13	44566	1	Spring, Torsion	40	R19111116	3	Washer, 5/16" SAE
14	44590	1	Tube, Handle (long)	41	23755	1	Gage, Flow Control
15	44631	1	Wheel, Ass'y. 12 x 1.75"	42	62732	1	Ass'y. Flow Control Mount
16	44630	1	Wheel, Ass'y. 12 x 1.75" (drive)	43	62798	1	Ass'y. Gear
17	44589		Tube, Handle (short)	44	23759	1	Flow Control Arm
18	23781	1	Shaft, Axle	45	44101	1	Cotter Pin 3/32" x 3/4" Lg.*
19	44665	2	Pin, Roll 5/32" Dia. x 1.25" Lg.	46	23533	1	Plate, Closure
20	44672	1	Bushing, Axle/Shaft	47	43000	1	Spring, Extension
21	44137	4	Washer, Flat 1/2" I.D.	48	43848	1	Grip, Flow Control Arm
22	R19171616	1	Washer, Flat 17/32" I.D.	49	44481	1	Cap, Vinyl
23	741-0248	2	Bearing Flange	50	44663	2	Hub Cap
24	44593	2	Spacer .75 O.D. x 1.75" Lg.	51	R19171616	3	Washer 17/32 x 1" x 16 Ga.
25	23524	1	Shaft, Sprocket	52	43849	1	Knob, Plastic 1/4-20 Thd.
26	04367	1	Spreader Plate	53	44285	1	Bushing Delring .375 I.D.
27	43850	2	Pin Spring 1/8" Dia. x 5/8" Lg.	54	43082	1	Nut, Hex Lock 3/8-16 Thd.
				55	44619	1	Optional Vinyl Hopper Cover
					44668	1	Owner's Manual

*Purchase common hardware locally.

REPAIR PARTS
303 West Raymond Street
Sullivan, Illinois 61951
(217) 728-8388